

JAN 30 2007

Serial No. 10/781,411
60137-245REMARKS

Claims 1, 2, 6-9, 18 and 20 are rejected under 35 U.S.C. 102(b) as being anticipated by Schluter (3975128). Schluter does not disclose a mold valve assembly including an injection piston that is moveable into a mold valve chamber. Schluter discloses a piston 3 having a planar end face 7. The piston 3 is advanced "until its end face 7 lies flush with the wall 13 of the chamber 12" (column 4, lines 10-12). The piston 3 is not *moveable into* the quieting chamber 12, it simply is moveable to be flush with the wall 13 of the quieting chamber 12. The claimed invention is therefore not anticipated by Schluter, and Applicant respectfully requests that this rejection be withdrawn.

Claims 3-5, 10, 15-17, 19 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schluter in view of Takizawa et al. (5770245). The Examiner admits that Schluter fails to disclose the claimed piston configuration, but states that Takizawa et al. discloses these features. The Examiner continues that it would be obvious to employ these features in Schluter. Applicant respectfully disagrees.

In regards to claims 3 and 16, the Examiner states that Takizawa et al. discloses a piston 32 having sealing rings 31 that are equivalent to the nonmetallic portion being between metallic portions, and that it would be obvious to employ these features in Schluter. Takizawa et al. does not disclose a mold valve piston that comprises a non-metallic portion between a first metallic portion and a second metallic portion. Takizawa et al. discloses band heaters 31 and a mixing member 32, but does not disclose if either the band heaters 31 or mixing member 32 are metallic or non-metallic.

In addition, it is not obvious to provide the piston 3 of Schluter with the band heaters 31 of Takizawa et al. to seal the piston 3 within the quieting chamber 12. The Examiner states that the band heaters 31 of Takizawa et al. would provide for an improved fit. However, the band heaters 31 of Takizawa et al. do not provide a sealing function, they provide a heating function. Takizawa et al. states that "the injection cylinder with the plunger therethrough has a heater or heaters on the outer surface thereof. The heater is for heating a portion of the injection cylinder..." (column 2, lines 20-23). The terminology "sealing rings" as used by the Examiner does not appear anywhere in Takizawa et al. In addition, in Figure 1 of Takizawa et al. there are visible gaps between the band heaters 31. These gaps would completely defeat the sealing

JAN 30 2007

Serial No. 10/781,411
60137-245

function that the Examiner argues the band heaters 31 perform. There is no motivation or suggestion to use the band heaters 31 for a sealing function. It would not be obvious to modify Schluter to include the heating rings 31 of Takizawa et al. Applicant respectfully requests that this rejection be withdrawn.

Claims 4, 5, 10, 15, 17, 19 and 21 depend on patentable independent claims 1 and 6 and are allowable for the reasons set forth above.

Thus, claims 1-10 and 15-21 are in condition for allowance. No additional fees are seen to be required. If any additional fees are due, however, the Commissioner is authorized to charge Deposit Account No. 50-1482, in the name of Carlson, Gaskey & Olds, P.C., for any additional fees or credit the account for any overpayment. Therefore, favorable reconsideration and allowance of this application is respectfully requested.

Respectfully Submitted,

CARLSON, GASKEY & OLDS, P.C.



Karin H. Butchko
Registration No. 45,864
Attorneys for Applicant
400 West Maple, Suite 350
Birmingham, Michigan 48009
(248) 988-8360

Dated: January 30, 2007

CERTIFICATE OF FACSIMILE

I hereby certify that this amendment is being facsimile transmitted to the United States Patent and Trademark Office, 571-273-8300 on January 30, 2007.


Amy Spaulding

BEST AVAILABLE COPY